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US

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. – 19. (cancelled)

20. (new) A method comprising

(a) identifying an antibody that binds to an antigen;

(b) providing the antibody's light chain variable region amino acid sequence and heavy chain variable region amino acid sequence; and

(c) producing a covalently linked scFv multimer comprising two or more copies of the light chain variable region sequence and two or more copies of the heavy chain variable region sequence, linked via linkers,

wherein the covalently linked scFv multimer binds to the antigen and exhibits an activity at a level that is (i) greater than the level at which the antibody exhibits the same activity and (ii) greater than the level at which a diabody exhibits the same activity, the diabody consisting of two identical, non-covalently associated single-chain polypeptides, each of which consists of one copy of the light chain variable region sequence linked via a linker to one copy of the heavy chain variable region sequence.

21. (new) A method comprising

(a) identifying an antibody that binds to an antigen;

(b) providing the antibody's light chain variable region amino acid sequence and heavy chain variable region amino acid sequence; and

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(c) producing a single-chain polypeptide comprising two or more copies of the light chain variable region sequence and two or more copies of the heavy chain variable region sequence, linked via linkers,

wherein the single-chain polypeptide binds to the antigen and exhibits an activity at a level that is (i) greater than the level at which the antibody exhibits the same activity and (ii) greater than the level at which a diabody exhibits the same activity, the diabody consisting of two identical, non-covalently associated single-chain polypeptides, each of which consists of one copy of the light chain variable region sequence linked via a linker to one copy of the heavy chain variable region sequence.

22. (new) The method according to claim 21, wherein the single-chain polypeptide of step (c) is a sc(Fv)2.

23. (new) The method of claim 20, wherein the antigen is a human receptor and the activity is an agonistic activity.

24. (new) The method of claim 23, wherein the receptor is myeloproliferative leukemia virus oncogene (mpl) and the activity is a thrombopoietin (TPO)-like agonistic activity.

25. (new) The method of claim 21, wherein the antigen is a human receptor and the activity is an agonistic activity.

26. (new) The method of claim 25, wherein the receptor is mpl and the activity is a TPO-like agonistic activity.

27. (new) The method according to claim 20, wherein the antigen is selected from the group consisting of members of the hematopoietic factor receptor family, members of the cytokine receptor family, members of the tyrosine kinase receptor family, members of the serine/threonine

kinase receptor family, members of the tumor necrosis factor (TNF) receptor family, members of the G protein-coupled receptor family, members of the glycosylphosphatidylinositol (GPI)-anchored receptor family, members of the tyrosine phosphatase receptor family, members of the adhesion factor family, and members of the hormone receptor family.

28. (new) The method according to claim 20, wherein the antigen is a human antigen selected from the group consisting of myeloproliferative leukemia virus oncogene (mpl), erythropoietin (EPO) receptor, TPO receptor, granulocyte colony-stimulating factor (G-CSF) receptor, growth hormone (GH) receptor, insulin receptor, Flt-3 ligand receptor, platelet-derived growth factor (PDGF) receptor, interferon (IFN)-α receptor, IFN–β receptor, leptin receptor, interleukin (IL)-10 receptor, insulin-like growth factor (IGF)-I receptor, leukemia inhibitory factor (LIF) receptor, and ciliary neurotrophic factor (CNTF) receptor.

29. (new) The method according to claim 20, wherein the antibody is human or humanized.

30. (new) The method according to claim 21, wherein the antibody is human or humanized.

31. (new) The method according to claim 23, wherein the antibody is human or humanized.

32. (new) The method according to claim 25, wherein the antibody is human or humanized.

33. (new) The method according to claim 26, wherein the antibody is human or humanized.

34. (new) The method according to claim 21, wherein the sequence of the sc(Fv)2 comprises, in order: the heavy chain variable region sequence, a first linker sequence, the light chain variable region sequence, a second linker sequence, the heavy chain variable region sequence, a third linker sequence, and the light chain variable region sequence.

35. (new) A method comprising

(a) identifying a first antibody that binds to a first epitope on a first antigen and a second antibody that binds to a second epitope different from the first epitope, wherein the second epitope is on the first antigen or on a second antigen;

(b) providing the antibodies' light chain variable region amino acid sequences and heavy chain variable region amino acid sequences; and

(c) producing a sc(Fv)2 comprising the light chain variable region sequence and the heavy chain variable region sequence of the first antibody and the light chain variable region sequence and the heavy chain variable region sequence of the second antibody, all linked via linkers into a single-chain polypeptide,

wherein the sc(Fv)2 binds to both the first epitope and the second epitope and exhibits an activity at a level that is greater than the level at which a diabody exhibits the same activity, the diabody consisting a first scFv non-covalently associated with a second scFv, the first scFv consisting of the first antibody's light chain variable region sequence linked via a linker to the first antibody's heavy chain variable region sequence, and the second scFv consisting of the second antibody's light chain variable region sequence linked via a linker to the second antibody's heavy chain variable region sequence.

36. (new) The method of claim 35, wherein the first and second epitopes are on a human receptor and the activity is an agonistic activity.

37. (new) The method of claim 36, wherein the receptor is mpl and the activity is a TPO-like agonistic activity.

38. (new) The method of claim 35, wherein the first and second antibodies are human or humanized.

39. (new) A method comprising

    (a) identifying an antibody that binds to an antigen;

    (b) providing the antibody's light chain variable region amino acid sequence and heavy chain variable region amino acid sequence; and

    (c) producing a single-chain polypeptide comprising two or more copies of a humanized version of the light chain variable region sequence and two or more copies of a humanized version of the heavy chain variable region sequence, linked via linkers,

    wherein the single-chain polypeptide binds to the antigen and exhibits an activity at a level that is (i) greater than the level at which the antibody exhibits the same activity and (ii) greater than the level at which a diabody exhibits the same activity, the diabody consisting of two identical, non-covalently associated single-chain polypeptides, each of which consists of one copy of the humanized version of the light chain variable region sequence linked via a linker to one copy of the humanized version of the heavy chain variable region sequence.